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ABSTRACT

School barriers to equal access need to be removed by fundamentally new policy initiatives at the state and district levels in order to assure educational opportunities for at-risk students. Gender, race, poverty and individual disabilities continue to generate barriers for at-risk students despite broad legal efforts at reform. The following school practices must still be addressed: (1) testing; (2) grouping and tracking; (3) curriculum and instruction; and (4) school organization and administration. The following policy approaches would overcome resistance to reform and permit educators and policymakers to work together: (1) place equal educational access high on the public policy agenda; (2) eliminate race and gender bias; (3) upgrade teaching and increase disadvantaged student access to highly qualified teachers; (4) alter formulas for compensatory education to account for the impact of poverty; (5) eliminate rewards for assessing and labeling students on the basis of social and/or personal predispositions; (6) develop model, integrated curricula and instructional strategies suitable for diverse students; (7) provide incentives for schools to forge non-traditional alliances among schools, families and communities; (8) join forces with all those who have a stake in schools, including universities, social service agencies, and the private sector; (9) deregulate schools and build capacity for improvement; (10) hold schools accountable for both equity and learning; and (11) marshal new resources and reconfigure existing ones. A 15-item bibliography is appended. (FMW)

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YOUTH AT RISK

ID 026 669

ACCESS TO KNOWLEDGE:
BREAKING DOWN SCHOOL BARRIERS TO LEARNING

by

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and

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FOREWORD

This paper is the eighth of an Education Commission of the States (ECS) series focusing on the problems of youth at risk of not successfully making the transition to adulthood -- the dropout, the underachiever and far too many others of our young people who end up disconnected from school and society. The topic of this paper is not one on which we frequently get questions from state policy makers; however, a growing number of educational researchers think it is the key to better serving all our youngsters. The topic focuses on school policies that intentionally limit a student's access to knowledge. Pamela Keating and Jeannie Oakes identify four categories of school policies that work to limit the likelihood that "at-risk" youngsters will reach their learning potential: testing practices, grouping and tracking practices, curriculum and instruction practices and school management practices.

This paper represents an important collaborative effort among the authors, the Center for Educational Renewal, the College Board and ECS. The College Board and ECS shared the costs associated with the writing and production of this paper. ECS is very proud of this partnership and will continue to work with these individuals and the College Board to develop effective policy options for youngsters at risk of school failure.

Pamela Keating is the associate director of the Institute for the Study of Educational Policy at the University of Washington. Trained in law and education, her work focuses on equity issues, particularly policies related to equal access and opportunity, as well as gender issues. Jeannie Oakes is a social scientist at the Rand Corporation. She has conducted studies of school and district policies including the assessment of tracking practices on curriculum content, teaching practices and classroom process. Her particular interest is learning opportunities for poor and minority students.

This collaboration would not have occurred without the encouragement of John Goodlad, director of the Center for Education Renewal at the University of Washington and Adrienne Bailey, vice president for academic affairs at the College Board. Their commitment to a quality document and to collaboration was greatly appreciated. Finally, we would like to thank the Carnegie Corporation of New York for supporting this working paper series.

Frank Newman
ECS President

Bob Palaich
Project Director

INTRODUCTION[1]

There are historical, legal and moral imperatives for breaking down school barriers that limit children's access to knowledge. The traditional political value of education in the United States argues for extending schooling benefits to all children and youth. Protecting educational opportunities for all citizens means that school access must be equitable.

Some school conditions prevent many students from obtaining full advantage from schooling, limiting their learning because of the school's response, individual characteristics of race, gender, economic circumstances and various vulnerabilities. Other barriers are built in to how the nation conducts schooling generally -- the ways that schools assess intelligence and ability, group and track children for instruction, fragment and trivialize curriculum and instruction, and organize and manage schools. Of course, the individual and school barriers interact with each other, and it is not surprising that those children most at risk of frustration and failure in school because of their race, gender, individual handicaps or economic situation suffer most from deficits in the way schools are conducted.

To be truly fair, schools must ensure equal educational opportunities to all students, regardless of personal circumstances. Moreover, schools are required to compensate for individual disadvantage in equalizing access to schools and school programs. Where school practice, itself, limits students' chances for education, special correctives are required to ensure all students' full participation.

Historical Responsibilities

Leaders in the early Republic recognized the importance of education in the development of political democracy. They moved rapidly to provide educational opportunities.

For the past 150 years, schools have been charged with preparing a uniquely diverse electorate for effective participation in democratic decision making and with forging common cultural bonds that transcend demographic and economic differences. Much of the early impetus for these democratic sentiments was directed toward Americanizing immigrants. Since the Second World War, the nation has widened its view of what it means to equalize social opportunity through schooling.[2] That view offers educational opportunity to everyone, including all those most disadvantaged whose fullest productivity a vital society requires.

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1 These policy issues are drawn from papers commissioned by the Center for Educational Renewal at the University of Washington with support from the College Board. Edited by John Goodlad and Pamela Keating, these papers will be published as a book, with additional material by the College Board, in early 1989. The individual papers are listed at the end of this paper.

2 Henry Steele Commager, "Our Schools Have Kept Us Free," Life, October 16, 1950, pp. 46-47.

Legal Duties

Several legal breakthroughs highlight postwar efforts to equalize educational opportunity:

- Brown v. Board of Education -- finding racial segregation to be inherently unequal
- Title IX -- protecting against discrimination in education on the basis of gender
- Public Law 94-142 and similar state legislation -- providing for handicapped students' special needs in order to participate fully in public schooling.

Through these and other state and federal laws and court decisions, the country has ended de jure segregation, expanded educational access for women, made school programs and facilities more accessible to handicapped student, and chipped away at many of the most blatant denials of equal opportunity. These and other mandates indicate how seriously society takes its public obligation to guarantee all students ample and high-quality opportunities for education.

Moral Commitments

John Dewey challenged the nation to consider education's relevance to the democratic principles of our society. A social return is demanded from all; opportunity must be extended to all. Every person counts. But Dewey was not speaking simply of maximizing "human capital" for social ends; he asked public schools to educate everyone because it is the right thing to do morally and ethically.[3] To meet Dewey's challenge, schools need to account for students' unequal prior experiences that exacerbate their differential access to opportunity -- whether or not these differences were initially caused by schooling itself.

Through compensatory and categorical programs, schools have attempted to counteract the effects of racial isolation and poverty. Some well-designed Head Start programs have yielded long-term benefits, as have desegregation plans that begin with the youngest children and are sustained over time. Specific resources have been directed to meet handicapped students' special needs.

The nation has attempted to make schooling fair -- to give all children equal opportunity. Yet the best efforts have been relatively small in scale -- touching the lives of only a small number of those who need them. For all the focus on fairness, schools have consistently fallen short of interrupting the patterns of school failure and limited life chances of the most disadvantaged students. Much work remains to be done.

Research reveals what many of the problems are, and there is enough knowledge to act. Educators need to consider both the conditions over which schools can have some control and the conditions that require a broader social infrastructure that supports children's education. There has been considerable progress in identifying and documenting who needs these supports the most, and in determining what school conditions are necessary to deliver the best education to those children. What remains is a matter of combining this knowledge of what needs to be done with the will to do it.

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3 John Dewey and James Tufts, Ethics, New York: Henry Holt and Co, 1908, p. 474.

RACE, POVERTY, GENDER AND INDIVIDUAL VULNERABILITIES

- The quality of education children receive can be predicted -- to a considerable degree -- by their race. Black, Hispanic and other non-Asian minorities typically will not receive equal or high-quality opportunities in schools.

- The quality of education children receive can be predicted -- to a considerable degree -- by their parents' income. Children from poorer families typically will not receive equal or high-quality opportunities in schools.

- The quality of education a child receives can be predicted -- to a considerable degree -- by his or her gender. Girls, typically will not receive equal or high-quality opportunities in schools in subjects like science, mathematics and technology.

- The quality of education children receive can be predicted -- to a considerable degree -- by the presence or absence of physically or socially debilitating handicaps. Those children with individual vulnerabilities and social disadvantages will typically not receive equal or high-quality opportunities in school.

Race

Court rulings and corrective legislation have eliminated some gross inequities in education, such as racial segregation, unequal allocation of resources, and blatantly inadequate or inappropriate materials. Nonetheless, biased texts and tests, prejudice among students and school personnel, differential classroom treatment and disproportionate disciplinary action replicate out-of-school conditions in courses and classwork in ways that will exclude great numbers of minority students from full school participation.

Classifications according to ability often reflect language and cultural diversity rather than actual differences in capacity. Poor and minority students seldom experience the enriched and higher-status curriculum associated with advantaged, advance-track students. Large, low-track programs are found in schools with higher percentages of racial minority students. Fewer advanced courses and smaller academic tracks, along with more remedial offerings in academic subjects and larger vocational programs, are found in schools serving predominantly poor and minority populations (Oakes and Lipton).

Underqualified teachers are disproportionately found in predominantly black, Hispanic and American Indian schools and classrooms. Teacher shortages are most acute and underqualified entrants to teaching are most numerous in the central city schools where most poor and minority students reside (Darling-Hammond). Those who need good teaching and who have the least resources for remedying the effects of social and economic isolation draw the least prepared and temporary teachers.

Minority students carry the additional burden of their own distrust of the dominant culture. This suspicion, justified historically and by current experience, further separates these students from the experiences that could increase their chances for success in school. Black children who strive for school success through assimilation risk judgments of "acting white" and may have to pay for their success with a kind of "racelessness" caused by not being fully accepted by either blacks or whites (Ogbu).

Poverty

For more than a decade, children have constituted America's poorest age group. About one quarter of the children in our country younger than 18 are poor. During this same time the rate at which children became poor has increased, and we can expect this growth to continue (Orland). Poor children are roughly twice as likely as non-poor children to be low academic achievers. Educationally, the nation has responded to childhood poverty primarily with assistance through Chapter I of the Education Consolidation and Improvement Act and its predecessor program, Title I of the Elementary and Secondary Education Act. These programs have been well-received and helpful to poor children, though they have not been large enough to do much more than scratch the surface of the overall need.

To a significant degree, factors such as parental aspirations for their children, the amount of reading material in the home and family attitudes toward education account for much of the variation in student achievement (Orland). Poverty may be seen as a proxy for the lack of some of these home supports. Since home supports differ depending on the nature or duration of the family's poverty, educational interventions need to account for wide variations in the lives of poor children. In other words, not all poor children have the same problems in school or need the same help.

So strong are the influences of school cultures, however, that students in schools with high rates of poverty share similar characteristics as students personally experiencing long-term poverty. Probably several features of the school environment in high- and low-poverty schools contribute to differences in student achievement. Peer influences on student academic norms, available resources, the professional quality of teachers and administrators and the presence of such school characteristics as shared goals, high teacher expectations for student performance and strong levels of parent involvement are all likely to influence achievement. For whatever reason, students in schools with high concentrations of poverty are more likely to perform poorly in school than those with similar socioeconomic backgrounds who attend schools with lower rates of student poverty (Orland).

Many of the same students who experience long-term poverty also attend schools with high poverty concentrations. They are more likely to be black, from rural areas and reside in the South. These students experience both kinds of intense poverty, exacerbating their educational disadvantage.

Gender

Barriers to women's full economic and social participation are embedded in the larger society and reflect traditional role expectations. As women's permanent labor force participation has continued to increase, Congress and the courts have provided protection against employment discrimination on the basis of sex and have secured women's equal political protection.

Under Title IX, federal funding for educational programs is contingent on compliance with the rules and regulations implementing the legislation. The powerful post-Depression strategy of tying allocations of federal money to institutional commitment to public purposes helps elicit schools' cooperation in striving for gender equity in education.

Schools now offer girls and young women substantially more opportunity to participate in all sports programs. School districts can no longer expel students or prevent them from

participating in school activities due to pregnancy. School counselors have begun to test and score all students' work using the same criteria and advise both girls and boys to pursue employment options that suit them instead of relying heavily on sex-stereotyped choices.

Nonetheless, men's and women's social roles continue to be inadequately addressed or misrepresented in educational materials and activities. For all the gender-fair examinations and adjustments that have occurred, sex-stereotyping and sexism remain evident in curriculum and instruction. Not only are males represented far more frequently in texts, tests and instructional examples, they are engaged in more challenging and interesting activities. Females are portrayed in more limited fashion, frequently in caregiving or homemaking roles.

Traditional role expectations continue to constrain all students' options and opportunities. Teachers, shaped by their own social experience, frequently play out past practices and prejudices in their work with both male and female students and treat students differently according to their sex. As a result of this differential student treatment and the organization of the school itself, significant differences in learning, achievement and opportunity are found between males and females at the conclusion of K-12 schooling (Keating).

Individual Vulnerability

Besides the social inequities inside schools associated with race, gender, and economic disadvantage, schools restrict the full access of disadvantaged students to real educational opportunity. Family disruption and divorce, family mobility and disconnection from school, models of dropping out at home and disability because of accident or illness, place children at risk of school failure. Alcohol and drug dependency, adolescent pregnancy and parenting responsibilities, personal pathologies and mental and physical illness or incapacity sometimes foreclose opportunities for full participation.

The interaction of vulnerable children with the content and structure of contemporary schooling often exacerbates the alienation and exclusion they already experience. Low grades, underachievement, truancy and disruptive classroom behaviors are the maladaptive responses of marginally engaged students (Sinclair; Richardson-Koehler and Colfer). These students' risk of school failure is magnified by the multiple dimensions of their disadvantages.

SCHOOL BARRIERS THAT FORECLOSE ACCESS TO QUALITY EDUCATION[4]

Broad legal requirements (e.g., Brown v. Board of Education, Title IX, Public Law 94-142) and specific compensatory efforts (Chapter 1) have not adequately insured the access of disadvantaged groups to the best possible educational opportunities. There are several reasons for this failure.

Legal efforts are typically slow and cautious, and compensatory efforts -- aside from small-scale successes such as Head Start -- have done little to alter the low levels of school support for children once they leave these programs or the type of support they experience outside of schools.

Stereotypes and prejudices die hard. Gender, race, poverty and individual disabilities continue to generate subtle and not-so-subtle barriers. Some help for disadvantaged children (e.g., bilingual education, school lunch programs, early child care, etc.) is opposed on political, ideological, pedagogical and economic grounds.

The very best educational opportunities are not widely available to *any* students, even those who are not at risk. Mainstream, middle-class youth may survive mediocre education, but children who are at risk of failure are the first to suffer the daily damage of schooling-as-usual.

Resistance to Reform

The current school reform emphasis on excellence offers an opportunity to focus on those aspects of schooling that limit learning and foreclose opportunity. Inappropriately narrow instructional activities, incomplete and unbalanced curricula and erroneous conceptions of individual differences and abilities must be corrected. For mainstream, middle-class youth, these are issues of excellence replacing mediocrity. For students at risk of school failure, they become matters of survival.

The nation needs to go beyond basic assurances of fair access to schools and school programs and expect more than equal access to mediocrity. Schools, themselves -- in their organization, in curriculum and instruction and in the professional preparation and work lives of educators -- limit the learning opportunities they profess to provide. Yet public pressures to maintain the status quo simply means more of the same. Despite reform rhetoric and some positive first steps, the nation's political and social climate consistently discourages meaningful reform, probably the most basic barrier to the access of disadvantaged individuals.

Four Schooling Barriers

If real reform is possible, where might one look to identify the most serious school problems and practices as candidates for fundamental change -- especially those that have the most damaging impact on disadvantaged youth?

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[4] John I. Goodlad, "Access to Knowledge", A Place Called School, New York: McGraw-Hill Company, 1984, pp. 130-166.

Testing practices, purporting to measure intelligence and ability so that curriculum and instruction can be tailored to individual differences, may actually limit learning opportunities.

Grouping and tracking practices limit disadvantaged students to the lowest-quality knowledge and the poorest-prepared teachers.

Curriculum and instruction practices are fragmented, emphasizing low-level skills and knowledge following narrowly behavioral, rather than cognitive, models of learning.

School management practices are centralized, top-down, factory production models which work against responsive and professional decision-making at school sites.

Assessing Intelligence and Ability

Insufficient understanding of intelligence and unfair distinctions based on the misuse of tests result in mislabeling, misclassifying and miseducating many students. Too often, educators are overly concerned with classifying students and, as a result, rarely use high-quality, informative assessments to shape instruction at the school and to guide policy decisions.

Popular views of intelligence and ability, as well as perceptions about the distribution of talent in the general population, influence educational practice. What seems fair and reasonable at the moment -- tests showing how students compare with others on global characteristics such as mathematics and verbal aptitude -- turns out systematically to limit some students' access to knowledge. For the most part, tests of intelligence, ability and achievement simply rank students, separating and segregating them and sorting them for future social participation. Such tests are used to select some students for enriched educational opportunities and slate others for low-level participation. Forecasting failure for some students severely limits their subsequent opportunity in school and later life.

Popular perceptions that intelligence is both fixed and finite supports testing that purports to measure these immutable abilities. Once the tests identify and legitimize students' differences, students are provided with different school experiences. In contrast, current research in cognitive psychology challenges traditional forms and uses of mental measurement. The best evidence from this work reveals an abundance of cognitive processes that go unmeasured, that children learn to be intelligent, and that it is possible for schools to nurture mental growth and produce significant gains in the intellectual development of individual learners.

Assessments based on theories of cognition -- learning and thinking processes -- look at how students are functioning mentally, rather than at the product of that functioning -- e.g., an I.Q. score. This distinction is significant because assessments that provide an understanding of how students make sense of instruction and that diagnose learning difficulties can enable educators to design instruction to help students develop higher levels of understanding and intelligence.

But because educators typically do not accept the idea that intelligence is complex, multidimensional and changeable, they have not rethought outmoded conceptions of the role of schooling in developing human potential. Few see the possibility of all students becoming persons capable of using knowledge in complex thinking and problem solving in a social context. Because they usually focus on how much fixed potential students have, educators are not primarily concerned with how to nurture and develop students' intelligence and

ability (Sirotnik). Because they typically do not consider how regularly traditional tests are abused, they fail to apply the most reasonable and useful standards for their use: What can be learned to improve the value of schooling for each student? (Hilliard).

A regrettable side-effect of the widespread misunderstanding of testing and its uses is the current reliance on standardized, norm-referenced tests for judging school quality. It is simplistic to think that students' scores on a set of multiple-choice test items provide very much useful information about the quality of their school experiences (Sirotnik). Certainly these test scores reveal something about what students have learned, but because much of the variance in scores can be accounted for by individual students' family background, they say little about overall school quality. Unfortunately, not only the accomplishment of students, but also the goodness of schools, school districts, states and the nation as a whole are being judged by narrow bands of scores on standardized tests. While tests have the potential to provide useful information, they can also distract policy makers from the real business before them -- supporting necessary changes in how schooling is conducted.

Grouping and Tracking Practices

Testing individual aptitudes is the foundation for school practices that identify individual *differences* in order to determine which students get what instruction. Tracking practices begin with the assumptions that differences among students diminish instructional effectiveness, and that students can be assigned fairly and accurately to intellectually homogeneous groups for instruction. This systematic separation of students begins early in their education and forecloses opportunities for enriched coursework for many students. By the secondary level, tracking placements sort students for school opportunities and subsequent social roles.

Children assigned to low-ability classes are taught different, less socially valued knowledge and skills. Emphasis is placed on rote learning, workbooks, kits and easy material. Regardless of ability or motivation, these students' academic mobility is constrained. They stand little chance for an improved school placement because those in low-track classes are usually denied access to the knowledge necessary to participate in more rigorous and interesting work (Oakes and Lipton).

Moreover, teachers in low-ability classes tend to be overly concerned with getting students to be punctual, sit quietly and follow directions. They are often seen as less concerned and more punitive. Discipline, class routines and student socializing cut into the classwork of low-ability groups, further eroding these students' opportunities for an education of value.

By contrast, teachers in high-ability classes more often encourage critical thinking and independent questioning. They are more enthusiastic, better organized and make lessons clearer. Students in these advanced groups typically spend more time on learning activities and homework. Nearly all students can indeed benefit from enriched learning opportunities and high-quality experiences in literature, languages, science and mathematics. But sorting practices regularly exclude students from classes with high-quality instruction.

Students who are poor or members of racial minority groups, especially black and Hispanic youth, are more frequently placed in low-ability, non-college-bound tracks. Black and Hispanic students are more often assigned to vocational programs, training for low-level occupations; they are seldom admitted to programs for gifted and talented students. Younger children who are initially similar in background and achievement become increasingly

different both in their achievement and expectations as a result of their group placements. These differences accumulate until they become quite pronounced in high school (Oakes and Lipton).

Tracking and the myths and misinformation that support these grouping practices constitute a severe barrier to equal opportunity in education. The quality of the curriculum and instruction for the high-ability group and the resources that support advance-track students also work well for lower-ability students. While many studies describe students' progress in mixed-ability groups, those not in the top groups or tracks suffer clear and consistent disadvantages from their academic placements. Tracking often seems to retard the educational progress of students identified as average or slow. Assignment to low tracks can lower student aspiration and self-esteem and negatively affect attitudes toward school. Sadly, those children who need more time to learn appear to receive less. Those who have the most difficulty succeeding in school have fewer of the best teachers. Those who stand to benefit from classrooms with rich resources (motivated teachers, successful classmates, enriched curricula) nearly always get the least (Oakes and Lipton).

Curriculum and Instruction

Differences in the knowledge available to students in separate groups and tracks reveal serious inequities in education. But the curriculum and instructional strategies that are common across all tracks are often mediocre even for average and above-average students. These practices also deserve scrutiny, with particular attention paid to their implications for the educational access of students at risk.

Telling and lecturing, along with monitoring seat work, dominate classroom teaching. But a much larger variety of instructional modes and activities is possible and necessary to teach all students. Unfortunately, teachers either lack the skills or do not feel inclined or empowered to implement a more varied repertoire of teaching techniques: coaching, demonstrating, tutoring, symbolically representing, role playing -- all in addition to lecturing. Skillfully varying teaching techniques and individualizing instruction are essential strategies to meet the range of aptitudes and differences encountered in classrooms. While most teachers reject the notion that students are passive receptacles for the teacher's knowledge, they, nonetheless, conduct class as if it were an accurate image for instruction (Goodlad).

Of course, instruction and curriculum follow from educators' and policymakers' conceptions of how children learn and what it means to be educated. When instruction and curriculum are shaped by knowledge of children's cognitive processes, lessons will be rich with meaning and more easily mastered and remembered by students. Such study features large-scale assignments, problem-solving approaches to knowledge, classics of literature, and activities in democratic participation. Enriched learning is not common in schools, and where it exists, too often it is only the already advantaged students who benefit. At-risk students are more likely to have lessons that are shaped by a behavioral or training perspective: lower-level skills, fragmented knowledge, or easily tested facts.

Educators have too few opportunities to examine and assess what, specifically, is worth knowing, and therefore, worth teaching. Few teachers are engaged in building the core curricula that could, but seldom does, capture the best ideas and methods we can identify (Goodlad).

Fragmented coursework, rather than integrated learning, is a particular burden for less capable students. "Spot" remediating by specialists can remove students from ongoing

activities and cause them to miss essential core curricular experiences with their peers. Students are too often pulled out of class to struggle with a different curriculum, rather than receiving the help that would support their success in a regular class. Low achievers are expected to synthesize various learnings into coherent patterns without benefit of the support and attachment associated with teachers and students immersed in the central curriculum activities of the school (Soo Hoo).

In many schools, classroom teachers are charged with orchestrating multiple programs (speech and hearing, remedial reading, etc.). These programs have little substantive connection to the central classroom curriculum and, because they rely heavily on specialists, little relationship to the teacher's frame of reference. Where formerly classroom teachers tried to accommodate students' diverse needs, many are now unwilling or unable to respond to variability in student capacity and achievement. With specialists shouldering the responsibilities for students who do not respond to standard instruction, many teachers no longer see it as their responsibility to meet a range of student need; nor do they find incentives or possess the skills to respond to variability in student capacity and achievement. They simply seek referrals to special programs for those students who do not fit the curriculum (Soo Hoo).

Organization and Administration

School organization and administration are frequently rigidly bureaucratic, frustrating genuine access to knowledge. Hierarchical, inflexible, top-down management supports the status quo in schools and limits reform.

Administratively, schools are modeled after corporate organization as it developed from the industrial period of the early part of this century. Schools are typically organized like little factories, turning out recognizably similar "products" over time. Administrators are trained in business management methods and often identify with businessmen. Efficient management is often more important than creative educational leadership. This perspective distances school leaders from the process of making knowledge accessible to children.

School organization and administration are better suited to the kinds of knowledge and skills included in schooling at the turn of the century. The factory model of schooling is characterized by lock-step learning, chopped up in discrete blocks of time, and narrow notions of performance. Disconnected coursework, a lack of coherence in core subjects and a narrow approach to learning focusing on limited objectives, cheapens and relativizes knowledge, giving little guidance to students who seek to integrate ideas and connect what they learn at school to the rest of their lives. This common pattern of school organization and administrative practices benefits some students more than others.

To equalize access for all students is to question the organization of the school itself. Few of today's school managers are prepared to provide leadership in questioning and re-shaping the organizations they direct. There are seldom incentives or rewards for changing the structure or content of schooling.

Administrators succeed professionally by improving the efficiency of the operation as a whole. In this environment, management practices and instructional accountability support curriculum and instruction that reduces knowledge to smaller and smaller units for mastery. In the interests of narrow and efficient accountability, many administrators seek safe and simple measures of success and rarely take thoughtful or bold action. Those in charge often show

a keen interest in budgets, buildings and buses, but less often evidence care for the curriculum and instruction that is the central activity of schooling or give sustained thought to the integration of information and the construction of meaning from diverse knowledge and perspectives. (Wilson and Wright).

Not surprisingly, opportunities for teacher-led innovation in school structures and programs are rare. Teachers who deviate from rigid instructional norms are usually suspect, and administrators, trained to see themselves as "in charge," rarely initiate the inquiry processes that are necessary catalysts for change and innovation. Teachers, in response, either conform to conventional practice or risk rebuffs or removal. Inside most schools, administrative preference and practice reward teachers for maintaining order and discipline, keeping students out of the hallways and quietly isolated in traditional classrooms.

Teachers are seen as skilled workers who have little control over resources, program organization, content and methods. This bureaucratic structure, maintained partly by the feminization of teaching, helps keep teaching from developing as a profession characterized by knowledge-based decisionmaking about learning and instruction. Not surprisingly, with other opportunities available to women, we currently face a shortage of *qualified teachers* -- with the most critical shortages in schools serving the most disadvantaged children. Moreover, currently inadequate teacher education programs, low pay and unattractive working conditions dominated by overregulation and standardization are unlikely to attract, prepare, empower or retain a cadre of teachers committed and able to help all students learn (Darling-Hammond).

Consequently, bureaucratic school organization and top-down management structures, especially in larger, urban districts, frustrate attempts to make schools responsive to changing individual and national needs, as well as sensitive to new knowledge. Rigid structures rarely have sensing mechanisms for detecting the educational implications of changes in the surrounding society, for example, increasing populations of students at risk of school failure. Moreover, there is little chance that schools in their current organizational form can adjust adequately to the changing social and economic conditions of students (Wilson and Wright).

Expectations for smooth operation, the predictability that characterize school and district procedures and behavioral expectations inside schools all make it difficult for school leaders to promote the kinds of learning that enhance social and economic development (Wilson and Wright).

It is ironic, for example, that many schools and districts are now buying packaged instruction in "critical thinking," taught in some instances by outside specialists, as if thoughtful analysis is an add-on. What these packages communicate is emblematic of the mixed messages schools send -- "Think critically, but do it in an orderly, prescribed way." Genuine, empowering inquiry to prepare students for an information-dominated society is still only an abstract concept, rarely found in schools. And, unless teachers and administrators participate in real inquiry themselves, it is unlikely ever to penetrate the school curriculum (Sirotnik).

Standardization is still preferred over innovation, efficiency counts more than excellence, and conformity to traditional, majoritarian assumptions and expectations about education is more valuable than creativity and innovation. Under these conditions, administrators and teachers are reduced to tinkering around the edges of educational practice rather than responding thoughtfully to individual differences and social change.

POLICY OPTIONS FOR STATES AND DISTRICTS

The foregoing discussion illustrates two important points: First, much of what schools are doing now leads to minimal successes with those students most at risk of school failure. Second, educators know, at a minimum, what else needs to be done. Commonly accepted school structures and practices -- supported by outmoded traditions and erroneous assumptions -- constitute institutional barriers to all students' learning, and they erect nearly insurmountable obstacles to those students most affected by social and economic disadvantage. We are unlikely to break down these barriers simply by adding new legislative or judicial mandates or developing categorical programs targeted at students at-risk of school failure (although these provide some relief).

If states and local schools hope to circumvent the dismal outcomes current conditions now portend, school barriers to equal access will need to be removed by fundamentally new policy initiatives. While basic alterations in the distribution of schooling opportunities and outcomes may appear radical, the necessary policy actions fall well within the traditional role of the states in overseeing education.

In the short term, new policies can alter current state and local regulations that limit access, create incentives for schools to change, marshal the resources and technical assistance that will enable schools to improve and generate public commitment to change. To the extent that deeply entrenched and unquestioned fundamental features of schooling limit students' learning, policy makers and educators must work together over the long term to eliminate barriers and assure educational equity to all students. The following policy approaches illustrate both these short- and long-term goals:

- **Place equal educational access high on the public policy agenda.**

Schools probably suffer more from the lack of public will than educational know-how. But as the recent successes of the federal education "bully-pulpit" clearly demonstrate, policy makers can be very effective in shaping public priorities. State and local policy makers can report information that helps identify real needs and build an appropriate reform agenda. The facts about school barriers can be startling enough to mobilize concern in necessary directions. Some state education agencies and local districts, for example, have begun to publicize the racial breakdowns of student enrollments in various courses and curriculum tracks -- data that point clearly to the differential access of minority students to advanced academic coursework.

This information, accompanied by calls for increasing the access of minority students to college-preparatory programs, can help catalyze needed changes in grouping and tracking practices. However, the strongest message will be sent if policy initiatives combine rhetoric with a call for increased resources -- funds targeted specifically at enabling schools to alter structures and attitudes that are barriers to all children's learning.

- **Eliminate remaining vestiges of race and gender bias in schooling practices and curriculum materials.**

Perhaps the most striking bias in schools is the restricted access of poor, racial minority students to rigorous academic work. Policies can ensure that schools enrolling large proportions of these students offer coursework that will prepare them for access to and

success in colleges and universities (physics and calculus courses, for example). In schools with mixed student bodies, policies can prompt procedures that provide minority students access to high-level curriculum and programs for gifted and talented students.

State education departments can exercise considerable leverage over the content of textbooks and actively work to eliminate biased instructional materials that misrepresent the lives of many Americans and miseducate children about the reality of diverse values and experiences. Textbook-approval committees and curriculum task forces can weed out those texts and materials that give little significant attention to the experiences of women and racial minorities.

In subjects such as science and mathematics where the bulk of teachers' time, interactions and encouragement is often allocated to white males, technical assistance can be provided to help teachers recognize and rectify this often unintentional bias. Additionally, deliberate efforts can be made to reverse the traditional recruiting and selection practices that have prevented women from obtaining administrative positions in schools with decision making responsibility or supervisory authority (Keating).

- **Upgrade teaching and increase the access of disadvantaged students to highly qualified teachers.**

Rigorous teacher education programs that improve the overall quality of the field and substantial changes in working conditions and rewards for teachers will help solve the pressing problems of teacher supply and quality (Darling-Hammond; Hodge). Equally important, policies must also provide incentives to attract and retain high-quality teachers in schools with the most disadvantaged populations.

Policies should be developed to alter the prevalent practice of assigning the most qualified teachers to schools and classes that serve the most advantaged students. Undoubtedly, such changes will require the participation and cooperation of teacher unions because these practices are likely to preclude teacher choice of initial assignments and eliminate teacher transfer rights based on seniority. Furthermore, policy makers can proceed with the assumption that teachers have a deep commitment to helping the disadvantaged if they feel that their personal and professional well-being is not jeopardized.

Creative new teacher assignment policies can also create incentives for highly skilled teachers to teach in heavily impacted schools. For example, policy makers might begin by upgrading the quality of teachers' worklives and provide special teaching opportunities in the most needy schools. Such incentives could include extra compensation for developing new school programs and instructional strategies in these settings, or for mentoring new entrants to schools serving disadvantaged students. Other incentives might be lower student-teacher ratios, less instructional and more planning time and the availability of enhanced facilities and special equipment and materials.

- **Alter formulas for compensatory educational resources and services to account for the impact of the longevity and high rates of poverty in schools.**

The clear association of the length of time children have suffered poverty and their academic achievement provides new insights for developing more effective policies to allocate special resources for remediation and extra academic supports. So, too, do data showing that poor students who attend schools with high rates of poverty have greater academic difficulty than do poor students attending schools with more affluent peers.

Because students who have experienced poverty the longest appear to be concentrated at the same schools, compensatory funds could be targeted most productively at schools with the highest concentrations of poverty.

Moreover, because the school-level characteristic of poverty rate seems to depress achievement beyond that of the poverty level of the individual child, compensatory programs may also be far more effective if they are school based, rather than student based. In short, compensatory programs can target resources and special expertise at improving the school as a whole, rather than by focusing on individual children (Orland). This policy direction is consistent with research that suggests that policy makers view the individual school as the primary unit of change.

- **Eliminate rewards for assessing and labeling students on the basis of social and/or personal predispositions.**

In most states and districts, special programs targeted at providing special assistance to students at risk of school failure require the labeling and sorting of these children into separate "pull-out" programs so that schools can be held accountable for extra funds. Often, such labeling and sorting is based on standardized intelligence or achievement tests. Unfortunately, such policies have the unintended effect of identifying intractable social or personal characteristics of children as the source of the problem, not the more easily alterable school practices that collide with their personal and social attributes.

Moreover, testing practices often create or sustain erroneous assumptions about the learning potential of students who are members of high-risk groups, such as racial minorities and those who are economically disadvantaged (Sirotnik; Hilliard). Removing labeling and accountability based on individual student performance can also help eliminate the bureaucratic requirements that gobble up teacher and administrative time with recordkeeping, budgeting and other paperwork that does not translate into improved instruction.

Instead, effective policies for ameliorating the disadvantages of students at risk of school failure should provide resources and technical assistance aimed at altering the social and instructional context of schools and classrooms -- and thus avoid identifying and labeling students. One strategy at the elementary level would be to require that specialists be integrated into the regular classroom and, together with regular classroom teachers, develop curriculum and instructional strategies to accommodate the needs of diverse groups of children.

Such an effort would not depend on labeling children as deficient, but simply identify schools with high rates of children from high-risk groups. For older children, shifting departmentalized junior highs to a middle school organizational pattern -- featuring teams of teachers responsible for diverse groups of students -- could promote an environment more caring and tolerant of individual and social differences (Richardson-Koehler and Colfer).

Since assessments of students' cognitive functioning are needed to diagnose particular problems and guide specific remedial efforts, policies can direct educators to use assessment tools that provide information about particular aspects of mental functioning and lead to specific instructional strategies to overcome weaknesses. Policies ought to discourage the use of traditional measures of intelligence that give educators little more than labels that follow children throughout school (Hilliard).

- **Develop model, integrated curricula and instructional strategies suitable for diverse groups of students.**

To succeed in school, all students -- especially disadvantaged students -- require access to a rigorous curriculum and challenging instruction. But they also need a supportive school culture that encourages them to stay in school and attempt to do well there. The most promising policies are those that attempt to create the conditions that help all children succeed -- organizational structures, instructional practices and relationships that provide them with evidence that they are capable of success and that school success is worth having (Comer).

Reform strategies must allow for the differences among children without consigning some to separate, inferior or low-status learning experiences (Soo Hoo). Popular tracking practices, ability groupings and pull-out programs that segregate students and restrict some students' access to knowledge are unfair and must be replaced with more flexible organizational patterns that accommodate individual differences in the same classrooms (Oakes and Lipton).

Educators must be helped to develop a core of learning for everyone and insist that this common curriculum take full account of individuality and cultural heterogeneity. Further, schools must incorporate new knowledge about race and gender into educational materials and teaching practices. For example, considerable evidence suggests that black and Hispanic students learn best in cooperative rather than competitive situations and that these strategies do not disadvantage others. States can develop model curricular frameworks to help inform local schools about these and other effective practices.

- **Provide incentives for schools to forge non traditional alliances among schools, families and communities.**

Many schools are currently establishing adult and peer tutoring programs to provide extra academic supports for students and others are initiating programs where teachers work with parents so they can provide instruction at home and in the classroom. Such efforts have increased student achievement.

However, more profound results can be expected if districts establish management policies that integrate the involvement of parents and students (as well as school and community professionals) into the ongoing work of the school. This community collaboration promises to create empowered parent involvement that translates into success for even the most disadvantaged children and instills greater confidence and competence for parents. Policies that facilitate cooperative interactions among all the players create an ethos in which parents feel welcome and needed at school (Comer).

While school leadership teams must operate within state and district guidelines and in concert with local authority, they can effectively coordinate school governance, develop comprehensive plans to achieve school goals and create staff development opportunities. States can provide incentives for leadership development by allocating special resources to support such school-based planning teams.

- **Join forces with all those who have a stake in schools -- universities, social service agencies, the private sector.**

Schools should probably concentrate their limited resources and technical capacity, on educational opportunities and outcomes. Yet public policy must also provide for

disadvantaged children's extra-educational needs -- nutrition, health, and employability. Schools should help students avoid teenage pregnancy, gang activity, substance abuse and crime. Educational efforts in these areas ought to elicit the participation and support of relevant government agencies, community groups and business interests. Forging such coalitions can generate greater resources for urban children and youth and result in increased political support for schooling.

Businesses' most promising contribution is providing a real-world experience on which disadvantaged youth can build hope for a future enhanced by education. Meaningful part-time and summer work and on-the-job training help students immediately and hold promise for the future. States and cities might want to consider incentives that ensure that partnership activities are perceived as serving business as well as schools. University-school partnerships can help create more effective organizational structures and instructional programs across the educational continuum (Hodge).

But policies establishing university-school partnerships should be made jointly between districts and university administration and include provisions for rewarding faculty participation within the university career advancement structure, as well as provide services to schools. State and local policies might clearly assign responsibility for health, substance abuse, crime prevention and other support programs to cooperating community agencies.

- **De-regulate schools and build capacity for improvement.**

Mounting evidence about effective school improvement and change makes clear that schools must be reorganized and renewed individually (Goodlad). New policies must remove disincentives to teacher professionalism and the development of high-quality shared educational programs for all children that flow currently from over-regulation and standardization of school organization, content, instructional processes and teacher evaluation. State and district policies should support site-based planning and program development. Policies can shift state and central-office administration away from mandating procedures toward building local-school capacity -- with time, material resources, central-office support and technical assistance, ongoing staff development opportunities at the site level and permission to redesign the system.

Policies can be framed that provide assistance for collaborative school restructuring, providing processes for shared leadership, communication, planning and implementation (Wilson and Wright). District office administrators can negotiate with unions to create enabling conditions for change, forging policies that insure staff stability and providing an established professional voice in school improvement plans. Such negotiations can smooth the way for teacher participation beyond what is specified in union contracts.

An essential part of capacity building lies in providing educators with access to information about what goes on within their own schools and classrooms: what courses are offered and who teaches and takes them, how classroom time is spent, how learning activities are organized, what curriculum materials are in use, what attitudes prevail, and so forth. Such information can be the starting point for school-based deliberations about what practices support or inhibit equitable student access and outcomes (Sirotnik).

- **Hold schools accountable for both equity and learning.**

Policies that deregulate school programs and focus on capacity building cannot abandon states', local school boards' or district administrators' responsibilities for educational

oversight. Policy makers can set targets for improvement and establish clear accountability mechanisms for equitable access and improved outcomes. States and districts can also mandate that equity be monitored by disaggregating indicator data by race, social class, gender and handicap.

Policy makers need to develop new modes of accountability appropriate for restructuring schools, however, they must develop more thoughtful means of assessing student progress designed to improve performance. They must recognize the limitations and misuses of current measures of school success and acknowledge how these data determine or depress opportunity for some students. States and districts must avoid overreliance on the results of nationally normed standardized tests and, instead, invest in more valuable indicators of school quality and student performance, for example, measures of the effectiveness of a school's efforts to be more responsive to families and the community and indices of a common curriculum and how it is responsive to students' individual differences. Most effective will be policies that allow schools, districts and states to negotiate specific local goals and indicators of improvement.

- **Marshal new resources and reconfigure existing ones.**

Breaking down barriers to access requires some new resources, though some costs can be absorbed by reordering priorities and reconfiguring existing programs. Schools need greater autonomy and flexibility to support teachers' efforts to create rich curricula and challenging learning tasks. Districts can provide time and technical assistance to local schools as well as shift existing staff development funds and expertise currently concentrated at the district level to individual schools. The cost of other policies such as high-quality early childhood programs or school-based health care -- might be met by schools joining forces with social service agencies, universities and businesses.

Short- and Long-Term Policy Effects

Each of these policy directions promises to begin chipping away at the school barriers that inhibit children's learning. Most are supported by evidence of educational effectiveness; many are feasible given current resources and technical expertise, and some will be met with little resistance. Understandably, policy makers are interested in practical strategies that are cost-effective and produce quick changes, those with the most "bang for the buck." And, indeed, the public has a right to see improvement after approving changes and spending money.

It would be misleading, however, to expect short-term policy changes to effect the essential restructuring of schools that this paper argues is necessary, and one must be realistic about time frames. The fundamental changes required for breaking down school barriers that limit children's learning will require sustained effort over the long term. Five, 10, or more years may be necessary before basic changes will pay off in significantly greater access to knowledge through improved teacher education, higher-quality teaching, significant alterations in school organization and classroom practices, or dramatic changes in dropout rates or minority enrollments in universities.

The policy issues discussed here are intended to stimulate both short-term actions and a longer-term dialogue in state houses, university departments of education, local school districts and local communities about fundamentally different solutions to an old, but increasingly serious, educational and social problem -- inequitable schooling in a democratic society.

SUPPORTING PAPERS

John I. Goodlad, "Common Schools for the Common Weal: Reconciling Self-Interest with the Common Good."

James P. Comer, "Home, School, and Academic Learning."

Martin E. Orland, "The Demographics of Disadvantage: Intensity of Childhood Poverty and its Relationship to Educational Achievement."

John U. Ogbu, "Overcoming Racial Barriers to Equal Access."

Pamela Keating, "Striving for Sex Equity in Schools."

Virginia Richardson-Koehler and Patricia Colfer, "Being At-Risk in School."

Robert L. Sinclair and Ward J. Ghory, "Last Things First: Realizing Equality by Improving Conditions for Marginal Students."

Asa G. Hilliard, "Testing and Misunderstanding Intelligence."

Kenneth A. Sirotnik, "Equal Access to Quality in Public Schooling: Issues in the Assessment of Equity and Excellence."

Jeannie Oakes and Martin N. Lipton, "Tracking and Ability Grouping: A Structural Barrier to Access and Achievement."

Suzanne Soo Hoo, "School Renewal: Taking Responsibility for Providing an Education of Value."

Carol Wilson and Lance Wright, "Enhancing Access to Knowledge Through School and District Organization."

Linda Darling-Hammond, "Teacher Quality and Equality."

Charles M. Hodge, "The Miseducation of Educators: Ending the Truce"

Jose A. Cardenas, "Political Limits to an Education of Value: The Role of the State"